January 4, 2006

PTO/\$B/21 (09-04) Approved for use through 07/31/2008. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Pacework Reduction Act of 1995, no persons are required to rescond to a collection of information unless it displays a valid OMB control number. Application Number 10/830,168 Filing Date TRANSMITTAL April 22, 2004 First Named Inventor **FORM** RUCHANAN HEGELVED Art Unit 1724 CENTRAL PAX GENTER Examiner Name BUSHEY, C. (to be used for all correspondence after initial filing) Attorney Docket Number P2004J011 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC 1 Fee Transmittal Form Drawing(s) Appeal Communication to Board Licensing-related Papers of Appeals and Interferences Fee Attached Appeal Communication to TC **√** (Appeal Notice, Brief, Reply Brief) Amendment/Reply Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Change of Correspondence Address Affidavits/declaration(s) Other Enclosure(s) (please Identify Terminal Disclaimer below): Extension of Time Request Request for Refund Express Abandonment Request CD, Number of CD(s) Information Disclosure Statement Landscape Table on CD Remarks Certified Copy of Priority Document(s) Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name ExxonMobil Research and Engineering Company Signature Printed name Glenn T. Barrett Rea. No. Date 38705 January 4, 2006 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class med in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: Signature

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Petern and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patenta, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need essistance in completing the form, call 1-800-PTQ-9199 and select option 2.

Glenn T. Barrett

Typed or printed name

Fees Paid (\$)

- 100 **=** 

Other (e.g., late filing surcharge):

4. OTHER FEE(S)

/ 50 **=** 

Non-English Specification, \$130 fee (no small entity discount)

Pg: 3/17

			U.S. Patent and	Tradamar	v.Office: U.S. DEPA	PTO/SB/17 (12-04V2) 7/31/2006, OMB 0651-0032 RTMENT OF COMMERCE
Under the Panerwork Reduction			espond to a collection of it	nformation	unless it displays a plete If Known	VALID CIMH CONTRI DUMONT
Errecting Fees pursuant to the Consolidate	ve on 12/08/2 sted Appropri	etions Act, 2005 (H.R. 4818).	Application Number		30,168	
		MITTAL	Application Number Fiting Date			PECE
•					122, 2004	CENTRAL FA
FOI	r FY 2	UUO	First Named Invento		CHANAN	
Applicant claims small	entity status	s. See 37 CFR 1.27	Examiner Name  Art Unit	<del></del>	SHEY, C.	JAN 2
TOTAL AMOUNT OF PAY			Attorney Docket No	172 P20	04J011	
METHOD OF PAYMENT	C (abook of	I that apply)				
	$\overline{}$					
CheckCredit (	Card L	Money Order LINO	ne L_lOther (pleas			
Deposit Account D	eposil Accou	nt Number: <u>05-1330</u>				esearch & Eng
For the above-identi	fied deposit	account, the Director is he	ereby authorized to: (ct	eck all t	nat apply)	
Charge fee(s)	indicated b	elow	Charge fe	e(s) indi	cated below, exce	pt for the filing fee
		e(s) or underpayments of f				
under 37 CFF VARNING: Information on this	3 4 16 and 1	1 17			•	vide credit card
(ARNING: Information on the Iformation and authorization	on PTO-203	8. 8.	MOTHERON SHOWN HEED	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
FEE CALCULATION			*			
. BASIC FILING, SEAF	RCH, AND	EXAMINATION FEES				
	FILING	FEES SEA	RCH FEES E		ATION FEES	
Application Type	Fee (\$)	Small Entity Fee (\$) Fee	Small Entity (\$) Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fees Paid (\$)
Utility	300	150 500		200	100	
Design	200	100 100	50	130	65	
Plant	200	100 300	* *	160	80	
Reissue	300	150 500		600	300	
Provisional	200	100 0	230	0	0	
2. EXCESS CLAIM FEI		100	U	Ŭ	-	Small Entity
Fee Description		•			Fee (\$)	Fee (\$)
Each claim over 20 (	including l	Reissues)			50	25
Each independent cla	im over 3	(including Reissues)			200	100 180
Multiple dependent of			. m - 1.4.40\		360	
Total Claims	Extra Cla	<del>_</del>	ee Paid (\$)			pendent Claims Fee Paid (\$)
22 - 20 or HP = HP = highest number of tota	dalma nald	x 50 = for, if greater than 20.	100		Fee (\$)	. 20 1 010 191
Indep. Claims	Extra Cla		ee Paid (\$)			
6 -3 or HP =	3	x 200 = _	600			
HP = highest number of Inde		ns paid for, if greater than 3.				
3. APPLICATION SIZE	FEE	exceed 100 sheets of p	anor (evoludina ele	tronica	ily filed scopen	ce or computer
in the specification and	ED 1 43/*	)), the application size	fee due is \$240 (\$17	5 for sn	nall entity) for 6	each additional 50
chapte or fraction to	hereof Ca	⊊ 35 H S C 41(aV1)(C	1) and 37 CFR 1.160	s).		
Total Sheets	Extra Sh	eets Number of e	ach additional 50 or f	ráction t	hereof <u>Fee (</u>	\$) Fee Paid (\$)

SUBMITTED BY	11/00/1		
Signature		Registration No. 38705	Telephone 703.846.4311
Name (Print/Type) Gleni		THOMBOTA COM	Date January 23, 2008

\_\_\_ (round up to a whole number) x

This collection of information is required by 37 CFR 1.138. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the Individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need essistance in completing the form, call 1-800-PTO-9199 and select option 2.

Fax sent by : 7038467799

PTO/SB/17 (12-04v2)
Approved for use through 07/31/2008, 0MB 0851-0032
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE of a collection of information unless it displays a valid OMB control number.

Signature   Filing   Fee (\$)   Fee	Under the Panerwork Reducti		no persons are mou	uneo no re	SCHOOL IST SECTION SHOW				VALUE COMPACE AND ADDRESS OF THE PARTY OF TH	
FEE TRANSMITTAL For FY 2005  Applicant claims small entity status. See 37 CFR 1.27 Art Unit 1724  AL AMOUNT OF PAYMENT (\$) 700  Attomey Docket No. P2004J011  HOD OF PAYMENT (check all that apply)  Check Credit Card Money Order None Other (please identify):  Deposit Account Deposit Account Number: D5-1330. Deposit Account Number: EXXONMobil Research & Eng. For the show-identified deposit account, the Director is hereby authorized to: (check all that apply)  Check Credit Card Money Order None Other (please identify):  Deposit Account Deposit Account Number: D5-1330. Deposit Account Name: EXXONMobil Research & Eng. For the show-identified deposit account, the Director is hereby authorized to: (check all that apply)  Charge engle depli indicated below Credit and information about not be included on this form. Provide credit card under 37 CFR 1.16 and 1.17  INING FIRE SEARCH FEES SEARCH FEES  FILING FEES SEARCH FEES SEARCH FEES  Brail Entity  Fee (\$) Fe	Effect Fees pursuant to the Consolid	ive on 12/08/20 lated Appropria	04, ions Act. 2005 (H.R.	4818).	4 - 4 - 4 - 5 -					
FOR FY 2005  Applicant claims small entity status. See 37 CFR 1.27  AL AMOUNT OF PAYMENT (5) 700 Attended December 1724  AL AMOUNT OF PAYMENT (5) 700 Attended December 1724  AL AMOUNT OF PAYMENT (check all that apply)  Check Credit Card Money Order None Other (please identify):  Deposit Account Deposit Account Number; 05-1330 Deposit Account Name; ExxonMobil Research & Eng.  For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)  Charge fee(s) indicated below.  Charge may additional fee(s) or underpayments of fee(s) Credit arry overpayments  Under 37 CFR 1.16 and 1.17  INING: information on min form may become public. Credit card Information about not be included on this form. Provide credit card attended authorization on PTO 2035.  CALCULATION  ASIC FILING, SEARCH, AND EXAMINATION FEES FILING FEES Small Entity  Fee (5) Fee (5) Fee (5) Fee (7) Fee (7) Fee (7) Fee (8) Fee (8) Fee (8) Fee (8) Fee (1) Fee (1				_		-				
And AMOUNT OF PAYMENT (\$) 700 Attorney Docket No. P2004J011    HOD OF PAYMENT (check all that apply)				· <del></del>					CFN	TOA
And AMOUNT OF PAYMENT (\$) 700 Attorney Docket No. P2004J011    HOD OF PAYMENT (check all that apply)	FO	r <b>r t</b> 20	)UO						<u> </u>	THALL
AL AMOUNT OF PAYMENT (\$) 700 Attomey Docket No. P2004-J011  HOD OF PAYMENT (check all that apply)  Check Credit Card Money Order None Other (please identify):  Deposit Account Deposit Account Number, 05-1330 Deposit Account Name: EXXONMobil Research & English (Check all that apply)  For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)  Charge fee(s) indicated below Deposit Account Name: EXXONMobil Research & English (Charge fee(s)) Indicated below. Except for the filling fee  Charge any additional fee(s) or underpayments of fee(s) Credit arm overpayments  Indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge any additional fee(s) or underpayments of fee(s) Credit arm overpayments  Indicated below. Except for the filling fee  Charge any additional fee(s) or underpayments of fee(s) Credit arm overpayments  Indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  Charge fee(s) indicated below. Except for the filling fee  EXAMINATION FEES  Examination  Examination on PTD 2038.  Examination Type fee(s) indicated below. Except for the filling fee fee fee fee fee fee fee fee fee fe	Applicant claims small	entity status.	See 37 CFR 1.2	7				<u>U.</u>		
Check Credit Card Money Order None Other (please identify):  Deposit Account Deposit Account Number: 05-1330 Deposit Account Name: EXXONMobil Research & Eng For the above-identified deposit account, the Director is horeby authorized to: (check all that apply)  Charge fee(s) indicated below Charge fee(s) indicated below. except for the filling fee Charge any additional fee(s) or underpayments of fee(s) Credit arm overpayments Under 37 CFR 1.16 and 1.17  Intig. information on this form may become public. Credit card information about not this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form may become public. Credit card information on this form. Provide credit card information on this form may become public. Credit card information the public manufacture in the							_			-11
Check Credit Card Money Order None Other (please identify):  Deposit Account Deposit Account Number 05-1330 Deposit Account Name ExxonMobil Resparch & Eng For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)    Charge fee(s) indicated below Charge fee(s) indicated below. except for the filling fee (charge fee(s)) indicated below. except for the filling fee (charge fee(s)) indicated below. except for the filling fee (charge fee(s)) indicated below. except for the filling fee (charge fee(s)) indicated below. except fee(s) indicated below. except for the filling fee (charge fee(s)) indicated below. except fee(s) indicated bel	OTAL AMOUNT OF FAT	HEIVI (4)	700	_	Attorney Ducke	it No.	2004001			
Deposit Account Deposit Account Number: 05-1330 Deposit Account Name: ExxonMobil Research & Enq For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)    Charge fee(s) indicated below. except for the filling fee   Charge fee(s)	IETHOD OF PAYMEN	T (check all	that apply)							
Deposit Account Deposit Account Number: 05-1330 Deposit Account Name: ExxonMobil Research & Enq For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)    Charge fee(s) indicated below. except for the filling fee   Charge fee(s)	Check Credit	Card D	Money Order	Nor	ne Other (	please ider	ntify):			
For the above-identified deposit account, the Director is horeby authorized to: (check all that apply)    Charge fee(s) indicated below	=		•					Mobil R	esearch & Er	nqpr
Charge fee(s) indicated below  Charge any additional fee(s) or underpayments of fee(s)  Charge any additional fee(s) or underpayments of fee(s)  Credit any overpayments  Extra Claims  Fee (s)	For the above-ident	ified deposit a	account, the Direct							
Charge any additional feo(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17  IllNG: Information on this form may become public. Credit card information should not be included on this form. Provide credit card lattice and authorization on PTO-2038.  ICALCULATION  ASIC FILING, SEARCH, AND EXAMINATION FEES  FILING FEES  SEARCH FEES  SEARCH FEES  Semall Entity  Small Entity  Small Entity  Small Entity  Small Entity  Fee (s)	_								ot for the filling	fee
Links: Information on this form may become public. Gredit card information should not be included on this form. Provide credit card lation and subtorization on this form may become public. Gredit card information should not be included on this form. Provide credit card lation and subtorization on PTO-2038.    CALCULATION		•		ats of fe		-			F	
CALCULATION	V     1 m do n 07 OC	O 4 4C and 4	47			•		form D	rida condit card	
CALCULATION   ASIC FILING, SEARCH, AND EXAMINATION FEES   SEARCH FEES   Small Entity   Small E	ARNING: Information on thi formation and authorization	is form may be n on PTO-2038.	come public. Credi	t card in	romation should r	TOT DO INCI	noeo on this	. ionii. Pto	rrue orealt cent	
Filling FEES   Small Entity   Fee (\$)   Fee	EE CALCULATION									
Filling FEES   Small Entity   Fee (\$)   Fee	BASIC FILING, SEA	RCH, AND	EXAMINATION							
Fee (\$)   Fee		FILING I	FEES			EXAM				
Sesign   200   100   100   50   130   65	Application Type			Fee (S		Foo			Fees Paid (	<u>\$)</u>
Section   Sect	Utility	300	150	500	250	200	100	)		
Section   200   100   300   150   160   80	Design	200		100	50	130	6.	j		·· <del>·</del>
rovisional 200 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Plant	200	100	300	150	160	80	)		_
EXCESS CLAIM FEES  Description  ach claim over 20 (including Reissues)  Althorized dependent claims over 3 (including Reissues)  Althorized dependent claims  Telephone of total desims paid for, if greater than 20.  Lephone and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for cach additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).  Total Sheets  Extra Sheets  Number of each additional 50 or fraction thereof.  \$130 Fee Paid (\$)	Reissue	300	150	500	250	600	300	)		_
Seach claim over 20 (including Reissues)  Seach independent claims over 3 (including Reissues)  Seach independent claims over 3 (including Reissues)  Autitiple dependent claims  Sextra Claims  Sextra Claims  Sextra Claims  Sea (\$) Fee Paid (\$)  Per Paid (\$)  Sea (\$) Fee (\$)	Provisional	200	100	0	0	0	. (	)		
Aultiple dependent claim over 3 (including Reissues)  Sach lindependent claim over 3 (including Reissues)  Aultiple dependent claims  Sach lindependent claims  Aultiple dependent claims  Sach lindependent claims  Sach lindepen	EXCESS CLAIM FE	ES	-				E.			
Authiple dependent claim over 3 (including Reissues)  Authiple dependent claims  Authiple dependent claims  Sextra Claims  Extra Claims  Extra Claims  Fee (\$) Fee Paid (\$)  Per highest number of total claims paid for, if greater than 20.  Sep. Claims  Extra Claims  Extra Claims  Fee (\$) Fee Paid (\$)  Total Sheets  Fee Paid (\$)  Fee Paid	Fee Description	(inaludina D	aiomiac)				E			
Aultiple dependent claims  tal Claims  Extra Claims  Extra Claims  22 - 20 or HP = 2 x 50 = 100							:			
tal Claims    Extra Claims   Extra Claims   Fee (\$)   Fee Paid (\$)										
Panishest number of total claims paid for, if greater than 20.    In the claims   Extra Claims   Fee (\$)   Fee Paid (\$)				<u>Fe</u>			_			
Extra Claims   Extra Claims   Fee (\$)   Fee Paid (\$)	22 - 20 or HP =	d doine said 6		_= _	100		E	8 <del>0</del> (\$)	ree Paid (\$	2
PPLICATION SIZE FEE the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).  Total Sheets  Extra Sheets  Number of each additional 50 or fraction thereof  -100 =	Indep. Claims		ns <u>Fee (\$)</u>	<u>Fe</u>			-			_
the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).  Non-English Specification, \$130 fee (no small entity discount)  THER FEE(S)  Non-English Specification, \$130 fee (no small entity discount)  Registration No. 38705  Telephone 703.846.4311  Registration No. 38705  Telephone 703.846.4311		3		_ =	_600					
the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).  Total Sheets  Extra Sheets  Number of each additional 50 or fraction thereof  - 100 =	ADDLICATION CITE	CEE								
sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).  Total Sheets  Extra Sheets  Number of each additional 50 or fraction thereof  (round up to a whole number) x  Fee (\$)  Fee (\$)  Fee (\$)  Fee Paid (\$)  Fees Paid (\$)  THER FEE(S)  Non-English Specification, \$130 fee (no small entity discount)  Other (e.g., late filing surcharge):  Registration No. (Attorney/Agent)  Registration No. 38705  Talephone 703.846.4311	If the specification and	d drawings (	exceed 100 shee	ts of pa	aper (excluding	electron	ically file	d sequen	ce or compute	r Len
Total Sheets Extra Sheets   Number of each additional 50 or traction mental   Fee 13    Fee 24     THER FEE(S)   Fees Paid (\$)    Other (e.g., late filing surcharge):   Registration No. (Attorney/Agent)   Regis	listings under 37 C	FR 1.52(e)	), the application	n size f	ee due is \$250 (	(\$125 IOI	r small en	nty) for c	ach additional	50
THER FEE(S) Non-English Specification, \$130 fee (no small entity discount)  Other (e.g., late filing surcharge):  TITED BY  We  Registration No. 38705 Registration No. 38705 Telephone 703.846.4311  Date January 23, 2006				or of ea	ch additional 50	or fraction	on themol	<u>Fee (</u>	<u>Fee Pa</u>	ld (\$)
Non-English Specification, \$130 fee (no small entity discount)  Other (e.g., late filing surcharge):  ITTED BY  We  Registration No. 38705  Telephone 703.846.4311  Data January 23.2006			_							
Other (e.g., late filing surcharge):  ITTED BY  Ure  Registration No. 38705  Registration No. 38705  Telephone 703.846.4311  Date January 23, 2006	OTHER FEE(S)			11	. 4!				Fees P	ald (\$)
Registration No. 38705 Telephone 703.846.4311  (Attorney/Agent) Telephone 703.846.4311	• •			ii entity	aiscount)					
ure Registration No. 38705 Telephone 703.846.4311	Other (e.g., late fili	ng surcharge	e):							
ure Registration No. 38705 Telephone 703.846.4311	BMITTED BY	0 ~ 1								
Date January 23 2006	nature		<del></del>		Registration No (Attorney/Apent)	38705		Telephon	e703.846.4311	
	me (Print/Type) Glenn T.	Berrett	<del></del>		marrie pri reporter			Date Jan	uary 23, 2006	

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including eathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Potent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.